1–2

20 Polygalaceae
(Krameriaceae)

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early productiveness of the plantations under their charge will be as certain a result of good management, on educated and sound principles, as the early maturity of the improved breeds of sheep and oxen and the anxiously-tended crops of the field and garden now are, in accordance with the careful study and teachings of cultural science, and the consequent vastly-improved practice of the farmer and gardener of the present time. Considering the utter neglect, in a public point of view, from which forestry has suffered so long in this country, compared with that of most continental nations, it is encouraging to think that private enterprise, and a patriotic desire amongst many of our best landowners, has done so much to improve and extend our forests and woodlands, thereby ameliorating the asperities of the country, affording a much-needed shelter to food crops, adding largely to the supply of remunerative labour for the working man, and greatly increasing the general productive economy of the nation.

Instances of successful and extensive planting are by no means a rarity among our enterprising landowners, and one particularly noteworthy example, of quite recent date, is given on another page of our present issue. What Mr. Mackay of Glengloy has so ably and successfully accomplished on his rugged Highland estates, must add immensely to their amenity and market value, and it requires no prophet to foretell the largely-increased income which the land so judiciously planted will return to the owner at a comparatively early period. Considering the great extent of fencing, which adds about £1 per acre to the cost of planting (set down at £3 11s. per acre), we must say that the operations of forming these plantations have been carried out by Mr. Mackay in an exceedingly efficient and economical manner, the success of which appears to be already beyond a doubt. Such a spirited practical example, of which the facts are plainly detailed, ought to give confidence to the hesitating owner of inferior land, the value of which for agriculture or grazing is rapidly diminishing, to begin at once a systematic course of planting, upon a scale commensurate with the wants and capacity of his property. From a monetary point of view, the investment is thoroughly safe, and the profits good and sure. Such a thing as failure need scarcely be anticipated, as sound judgment and good management are certain to command success.

THROUGH the courtesy of Professor Sargent, of Brooklyn, Massachusetts, we have received a preliminary catalogue of the *Forest Trees of North America*. The flora of North America is unusually rich in

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In discussing the subject, whether or not it is judicious and profitable for a landowner to plant with forest trees the inferior portions of his estate, meaning thereby waste land and all such parts as return a rental below a certain sum per acre—varying according to different views and opinions from a merely nominal value to a rate of twenty shillings or more per acre—much has been said in our own pages and those of our contemporaries upon many points of deep interest to landowners who intend to begin planting, with a view to obtaining within a reasonable time a fair return for their outlay, and a permanent increase in the annual value of their property. That both these desirable objects can be successfully accomplished by systematic and judicious planting upon almost every landed estate in this country, is a matter which no one who thoroughly understands the subject will for a moment attempt to dispute. Still there are many who, through lack of knowledge, or the want of a good practical example to excite their attention and prompt them to follow, are hesitating about whether they ought to plant their less valuable land, or accept the inevitable reduction in the rents paid for such land by agricultural, grazing, or even sporting tenants, in these times of severe commercial and agricultural depression. Plantations, when formed with judgment and skill, have proved in every instance to be highly beneficial to the district in which they are situated, and where they have been managed by careful and experienced men they have never failed to be remunerative in a high degree to their fortunate owners. With the knowledge which we at present possess of the science and practice of forestry, quick and profitable returns are frequently obtained where the plantations are carefully managed and their produce disposed of or utilized to the best advantage. Under a special and well-regulated system of education and training for our foresters, so as to duly qualify them in every branch of the science and art of forestry, the

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March 15 1877

Asheville N.C. 1876

x 10

seed contracted into a stipe
aril less almost half as long as seed
seed hairy, at peak

hairy

x 10

wing ovate pedicelled as wide but much longer (nearly twice as long) than capsule
pedicel as long as capsule

Kentucky, Short
seed the same

Smithsonian

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"Polygala sanguinea"

March 13 77

Beverly, Mass. 1856

211

×10

lateral

ventral towards dissepiment.

×10

style ×30

×10

×30

var albiflora

Concord Mass.

much wider and

lateral sepals at last

as long as capsule

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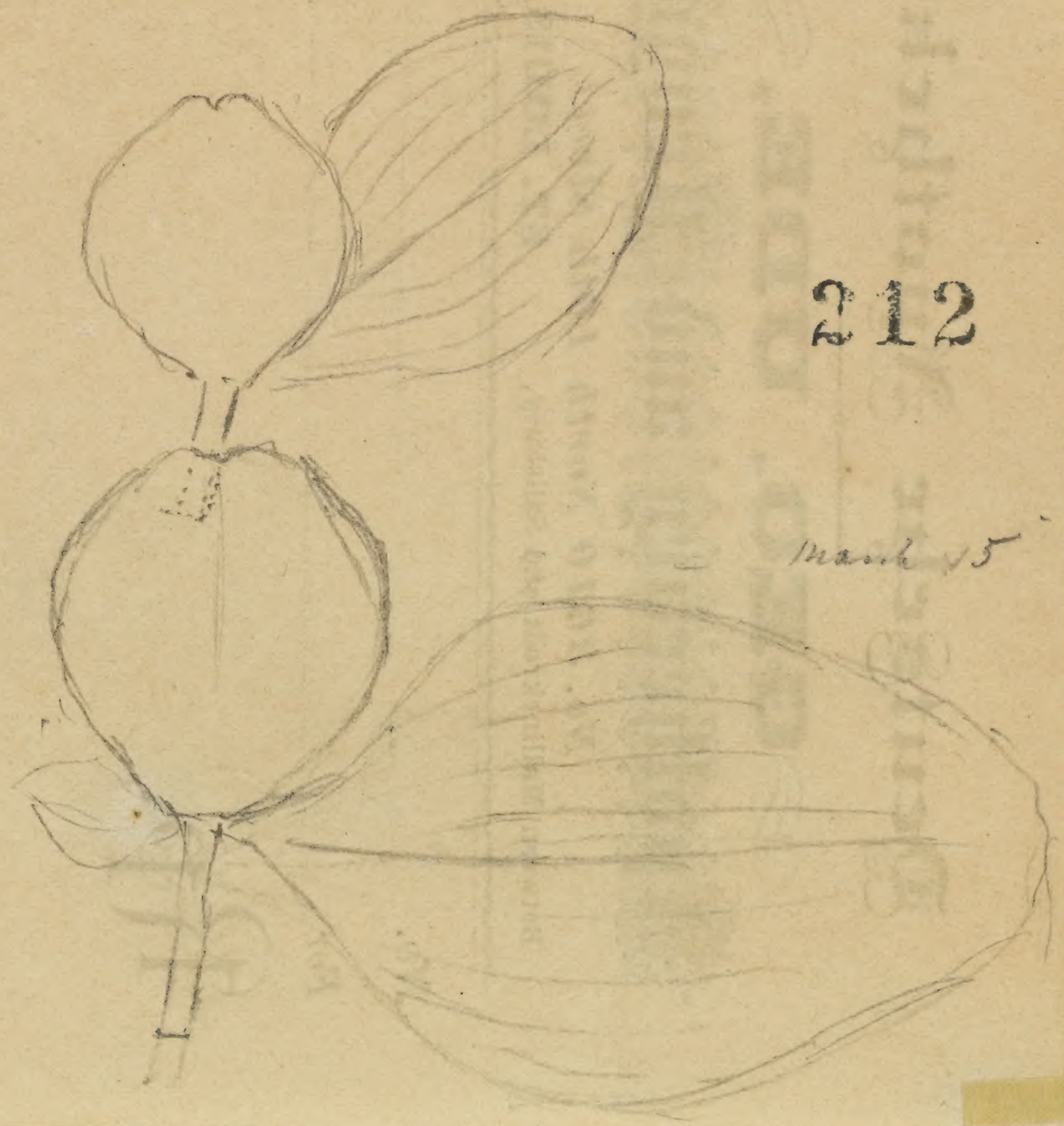
St Louis 1833

March 13 37

×10 ×30 ×10



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Mark 15

Aegus desmarestii
" Perpusillus "

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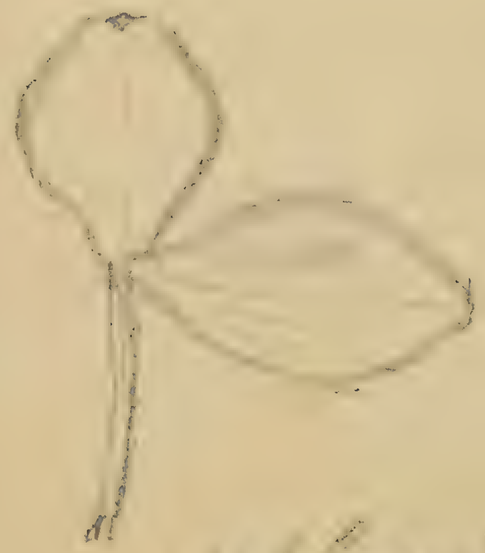
Polygonum lapathifolium
Linnaeus, Cochin

March 15 1922

X 1.



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Polygala Nuttallii

oppos. Philadelphia Sept. 1877

March 12, 1877

214

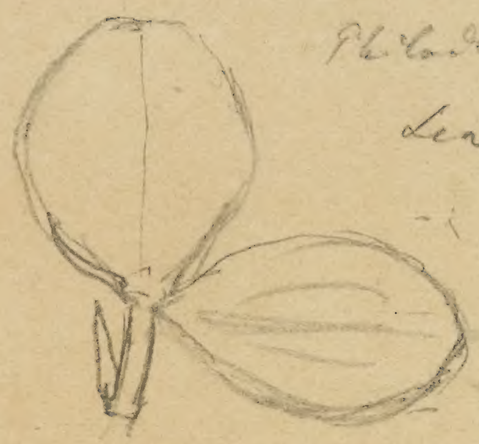
×10

style ×30.

capsule ×10 & lateral sepal

Philadelphia

Len



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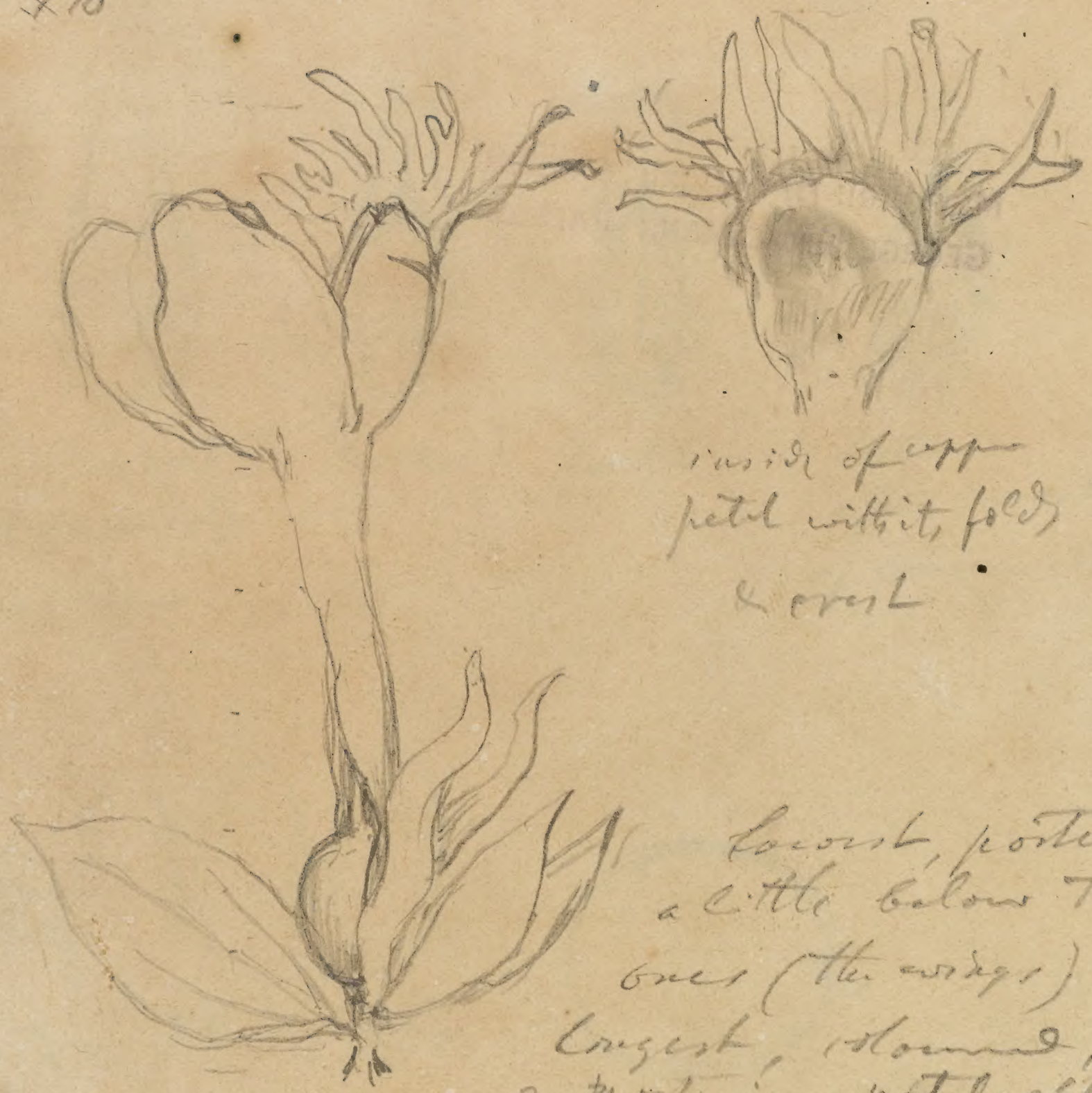
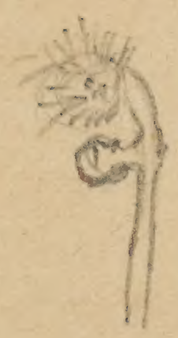
Polygala incarnata L. Sept 6 1865

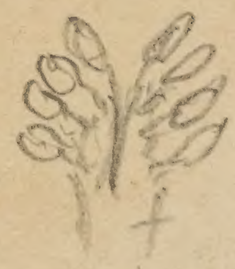
×10



inside of upper petal with it folds & crest



stigma white hairy with yellow gland under it



8 stam ÷ 2 bundles

215

lowest, posterior sepal broadest a little below the others 2 lateral ones (the wings) linear lanceolate, longest, obtuse, twisted. 2 posterior petals obtuse oval.

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ALEX. LEITCH.

APOTHECARY & PHARMACEUTIST,

Marble Building Cor. Fourth & Olive Sts. St. Louis, Mo.

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